

REMARKS

New Claims 34 and 35 have been added. No new matter is introduced. Claims 1 and 12-35 remain pending.

The Examiner has rejected claims 1, 12, 16-18, 21, 23, 27, 28, 29 and 32 under 35 U.S.C. §103(a) as being unpatentable over Besser (US Patent 6,212,563) in view of Laubach et al. (U.S. patent 6,028,860). Claims 13, 15, 20, 24, 26, and 31 are rejected under 35 U.S.C. §103(a) as being unpatentable over Besser and Laubach in further view of Lim et al. (U.S. patent 5,884,024). Claims 14, 19, 25, and 30 are rejected under 35 U.S.C. §103(a) as being unpatentable over Besser and Laubach in further view of Woundy (U.S. patent 6,031,841). Claims 22 and 33 are rejected under 35 U.S.C. §103(a) as being unpatentable over Besser and Laubach in further view of Rekhter et al. (U.S. patent 6,339,595). The Examiner's rejections are respectfully traversed as follows.

Claim 1 is directed towards an "apparatus for routing packets from a first network node to a second network node in a data network." Claim 1 recites "means for assigning and then sending one or more unique first node identifiers (IDs) to the first node, wherein at least one of the one or more unique first node IDs is assigned and sent in response to a request from the first node for an identity assignment, wherein each of the one or more unique first node IDs is assigned by one or more entities other than the first node, and wherein each of the one or more unique first node IDs is associated with a first virtual private network (VPN)." Claim 1 further recites "means for receiving a packet from the first node, said packet including at least one unique first node ID and routing information for routing said packet to a destination address associated with said second node" and "means for routing the received packet to the destination address based on the received routing information and the received at least one unique first node ID and the destination address being associated with the first VPN." Claims 12 and 23 recite techniques or apparatus for performing similar operations.

It appears that the Examiner is citing the primary reference Besser for disclosing receiving from a first node a request for a unique first node identifier (ID) and dynamically assigning and sending a unique first node ID from a different device to the requesting node in response to such request. The Examiner admits that Besser fails to disclose "each of the one or more unique first node ID's is associated with a first virtual private network (VPN)." The secondary reference Laubach is then cited as disclosing this feature. In general, Laubach is directed towards prioritizing virtual connection transmissions by converting packets into ATM cells and prioritizing such cells. See

Abstract. Specifically, Laubach describes virtual connection information that “allows individual cells to be prioritized for transmission.” Additionally, this virtual connection information “is used to identify one or more subscriber terminal units (STUs) which are to receive the particular cell.” Laubach also discloses that this virtual connection information “identifies particular circuits within designated STUs to which an individual ATM cell is to be routed.” See Col. 7, Lines 27-30, emphasis added. Figure 3 shows each STU as being associated with a particular virtual path identifier. Laubach appears to disclose that packets are converted to ATM cells and these ATM cells are associated with particular virtual connections (or virtual path identifiers) that correspond to the intended destination. For example, a multicast message is copied into multiple ATM cells that are each associated with a different virtual path identifier (for each destination STU). See Col. 11, Lines 46-61. In other words, the packets of Laubach appear to be copied into ATM cells that each correspond to the intended destination or a particular virtual identifier (and path). It is respectfully submitted that the virtual connection information of an ATM cell, as disclosed in Laubach, merely refers to the intended destination of such packet, rather than associating such packet with a virtual private network or VPN, in the manner claimed. Accordingly, it is respectfully submitted that Laubach fails to disclose a unique first node ID that is associated with a VPN, in the manner claimed.

Even if one were to interpret the virtual connection information as a VPN and combine the system features of Beser with the system features of Laubach, the techniques and apparatus of the claimed invention would not be achieved. Beser discloses dynamic assignment of an IP address to a requesting node, while Laubach appears to disclose “virtual connection information” that is used to identify which subscriber terminal units (STU) are to receive the ATM cells. See Col. 7, Lines 27-30. Specifically, if the dynamic IP assignment system of Beser was combined with the feature of associating a destination virtual connection (STU) with a converted ATM cell as described in Laubach, the claimed invention of dynamically assigning a node identifier associated with a particular VPN (or mechanisms for performing same) would not be achieved. For instance, the system of Beser would still require mechanisms for associating the dynamically assigned node IP addresses of Beser with particular virtual connections of Laubach. For example in one embodiment, tables for corresponding virtual connections and IP addresses would need to be set up and maintained. Since combining the features of Beser with the features of Laubach would still require significant modifications to the combined system to obtain the claimed invention, it is respectfully

submitted that the combination would still fail to teach or suggest techniques or apparatus for dynamically assigning a unique node ID that is associated with a VPN, in the manner claimed.

Additionally, one of ordinary skill in the art would not dissect this assigning operation (or apparatus for performing same) into disjointed parts. For example, the Examiner argues that the primary reference Beser was relied upon to disclose dynamic ID assignment, while Laubach is relied upon as disclosing associating a VPN. This dissecting of the claimed operation can be described more generally as dissecting “dynamically assigning A (node ID) associated with B (a particular VPN)” into two parts: (i) “dynamically assigning A” and (ii) “associated with B.” One cited reference discloses “dynamically assigning A”, while a second reference discloses “associating X with B.”

To facilitate understanding of the possible conflicting effects of this type of dissection rejection to a claimed process step (or apparatus for performing same), such a dissection analysis will be applied to a bread making process. If one were to claim an operation “setting a baking stop time associated with the bread reaching a certain firmness level”, one would not expect such an operation to be dissected into the following disjointed parts: (i) “setting a baking stop time” and (ii) “associated with a certain firmness level”, because these operation aspects are too closely tied to each other and would be reasonably analyzed together as a whole. For example, it would not be reasonable to reject such setting operation based on a first reference that discloses “setting a baking stop time associated with a coloration level” and a second reference that discloses “setting a time duration for kneading the bread dough associated with a certain level of firmness.” Although generally related to bread baking, these two different disclosed operations would result in different outcomes and would not result in the outcome of the claimed example process. That is, the first teaching of “setting a baking stop time associated with a coloration level” would result in particular baking stop time, while the second teaching of “setting time duration for kneading the bread dough associated with a certain level of firmness” would result in a kneading duration. Both of these results would likely differ from the result from the example claimed operation of “setting a baking stop time associated with the bread reaching a certain firmness level.” Additionally, these two teachings would also each have to be dissected and these individual dissected parts would then have to be combined to obtain the claimed operation of “setting a baking stop time associated with the bread reaching a certain firmness level.” It is submitted that one would reasonably not break down

such individual teachings from two different references in order to combine the dissected pieces into this new operation. Likewise, one would not reasonably dissect the teachings of Beser and Laubach to form the claimed assigning operation. For example, the teaching of Beser to dynamically assign an IP address to a node would have a different result (e.g., node would have an IP address) than the teaching of Laubach to associate a converted ATM cell/packet with its intended destination or virtual connection (e.g., sending ATM cells to their intended destinations). Such systems with vastly different outcomes would not likely be combined to form the claimed combination.

In light of the foregoing, it is respectfully submitted that claims 1, 12, and 23 are patentable over the cited art of record. The Examiner's rejections of the dependent claims are also respectfully traversed. However, to expedite prosecution, all of these claims will not be argued separately. Claims 13-22 and 24-35 each depend directly or indirectly from independent claims 12 or 23 and, therefore, are respectfully submitted to be patentable over cited art for at least the reasons set forth above with respect to claims 12 or 23. Further, the dependent claims require additional elements that when considered in context of the claimed inventions further patentably distinguish the invention from the cited art. For example, claims 34 and 35 specify that "each of the one or more unique first node IDs is associated with the first VPN so as to specify the first node as a member of the first VPN and wherein the received packet is only routed to the destination address if the destination address is also associated with the first VPN so as to specify a device at the destination address as a member of the first VPN." Although the secondary reference Laubach discloses virtual connection information that is assigned to each ATM cell, such virtual connection information does not specify the first node as a member of the first VPN or that a packet is only routed to a destination that is also a member of such first VPN, in the manner claimed.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. If the Examiner believes that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number listed at the bottom of this page.

Applicants hereby petition for any extension of time that may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this amendment is to be charged to Deposit Account No. 504480 (Order No. CISCP134C1).

Respectfully submitted,
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